

CLAIMS

1. A printer comprising:
 - one or more consumable components, each consumable component having an image zone and a non-use zone;
 - 5 a protective housing enclosing each of the one or more consumable components, each protective housing having an exposure gap through which image information is transferred to or from a consumable component during a printing process;
 - a printer driver module configured to control the transfer of image information to and from each image zone through an exposure gap and position each 10 non-use zone at an exposure gap during periods of nonprinting.

2. A printer as recited in claim 1, wherein the printer driver module is further configured to avoid transferring image information to a non-use zone.

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3. A printer as recited in claim 1, wherein each non-use zone is designated by the printer driver module.

4. A printer as recited in claim 1, wherein the printer driver module is stored 20 on and executes on a host computer.

5. A printer comprising:
 - one or more consumable components, each consumable component comprising a process surface, the process surface comprising a non-use zone;
 - 25 a protective housing enclosing each consumable component, the protective housing comprising an exposure gap, wherein the process surface translates past the exposure gap;

printer control logic that positions each non-use zone at an exposure gap during periods of nonprinting.

6. A printer as recited in claim 5, wherein the process surface further
5 comprises an image zone that is exposed to image information during periods of printing.

7. A printer as recited in claim 5, wherein the printer control logic avoids transferring image information to a non-use zone.

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8. A printer as recited in claim 5, wherein the non-use zone is designated by the printer control logic.

9. A printer as recited in claim 6, wherein the image zone is designated by
15 the printer control logic.

10. A printer as recited in claim 5, wherein the printer control logic is stored on and executes on a host computer.

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11. A printer comprising:

an intermediate transfer belt comprising an image zone and a non-use zone;

a protective housing encasing the intermediate transfer belt, the protective housing having a gap for exposing the image zone to image information during a
25 printing process; and

printer control logic that positions the non-use zone at the gap during periods of nonprinting.

12. A printer as recited in claim 11, wherein the printer control logic is configured to transfer image information to the image zone and not to the non-use zone during periods of printing.

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13. A printer as recited in claim 11, wherein the printer control logic designates the non-use zone.

14. A printer as recited in claim 11, wherein the printer control logic
10 designates the image zone.

15. A printer as recited in claim 11, wherein the printer control logic is located on a host computer and executes on the host computer.

15 16. A printer comprising:

an insertable cartridge comprising a photoconductor drum and an intermediate transfer belt, the photoconductor drum and intermediate transfer belt each configured with an image zone and a non-use zone;

the cartridge further comprising a protective housing having an exposure gap for the photoconductor drum and an exposure gap for the intermediate transfer belt; and

20 printer driver logic configured to control the transfer of image information to and from each image zone through the exposure gaps during periods of printing, and position each non-use zone at an exposure gap during periods of nonprinting.

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17. A printer as recited in claim 16, wherein the printer driver logic is further configured to avoid transferring image information to a non-use zone.

18. A printer as recited in claim 16, wherein each non-use zone is designated by the printer driver logic.

5 19. A printer as recited in claim 16, wherein the printer driver logic is located on a host computer and executes on the host computer.

10 20. A printer having one or more insertable consumable components, each consumable component including a process surface enclosed in a protective housing having an exposure gap, the printer comprising:

 printer control logic to designate a region of the process surface as a non-use zone, and to position the non-use zone at the exposure gap during periods of nonprinting.

15 21. A printer as recited in claim 20, wherein the printer control logic designates a region of the process surface as an image zone and controls the exposure of the image zone to image information during periods of printing.

20 22. A printer as recited in claim 20, wherein the printer control logic avoids transferring image information to the non-use zone during periods of printing.

25 23. A printing system comprising:
 a printer;
 one or more consumable components insertable into the printer, each consumable component having an image zone and a non-use zone;
 a protective housing enclosing each of the one or more consumable components, each protective housing having an exposure gap through which image

information is transferred to or from a consumable component during periods of printing;

a host computer coupled to the printer and comprising printer control logic, the printer control logic configured to control the transfer of image information to and from each image zone through an exposure gap during periods of printing and position each non-use zone at an exposure gap during periods of nonprinting.

24. A printing system as recited in claim 23, wherein the printer control logic is further configured to avoid transferring image information to a non-use zone.

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25. A printing system as recited in claim 23, wherein each non-use zone is designated by the printer control logic.

26. A printing system as recited in claim 23, wherein each image zone is 15 designated by the printer control logic.

27. A printing system as recited in claim 23, wherein the printer control logic is located on and executes on the printer.

20 28. A method of printing using a print device, the print device comprising one or more consumables, each consumable comprising a process surface and each consumable enclosed in a protective housing having an exposure gap, the method comprising:

designating a region of the process surface as a non-use zone;
25 avoiding the transfer of image information to the non-use zone during periods of printing; and

positioning the non-use zone at an exposure gap during periods of
nonprinting.

29. The method as recited in claim 28, further comprising:
 - 5 designating a region of the process surface as an image zone; and
 - controlling the process surface to facilitate the transfer of image information to and from the image zone during periods of printing.
30. Computer-readable media having computer-readable instructions for
 - 10 performing the method as recited in claim 28.
31. A method for protecting a consumable component of a printing device, the consumable component encased within a protective housing having an exposure gap, the method comprising:
 - 15 defining a region of the consumable component as a non-use zone;
 - positioning the non-use zone at the exposure gap during periods of nonprinting.
32. The method as recited in claim 31 further comprising:
 - 20 avoiding the transfer of image information to the non-use zone during periods of printing.
33. The method as recited in claim 31, further comprising:
 - 25 defining a region of the consumable component as an image zone; and
 - during periods of printing,
 - transferring image information to and from the image zone; and
 - avoiding the transfer of image information to the non-use zone.

34. The method as recited in claim 31, wherein the consumable component is an intermediate transfer belt, the method further comprising:

defining a region of the intermediate transfer belt as an image zone; and
5 exposing the image zone to a print medium through the exposure gap during periods of printing.

35. The method as recited in claim 31, wherein the consumable component is a photoconductor, the method further comprising:

10 defining a region of the photoconductor as an image zone; and
exposing the image zone to a print medium through the exposure gap during periods of printing.

36. The method as recited in claim 31, wherein the consumable component is a photoconductor, the method further comprising:

defining a region of the photoconductor as an image zone; and
forming an image on the image zone by exposing the image zone to a photoelectric imaging process and dusting the image zone with toner through the exposure gap.

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37. Computer-readable media having computer-readable instructions for performing the method as recited in claim 31.